

## A New Species of *Scaphinotus* from Oregon<sup>1</sup>

(Coleoptera: Carabidae)

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During the past three summers I have collected throughout western Oregon attempting to get a reasonable series of specimens of the species and subspecies of *Scaphinotus*, subgenus *Stenocantharis* Gistel (*Pemphus* Motschulsky), to determine geographic distribution and to study their biology, ecology and morphology. While searching the high Cascade Mountains a new species belonging to the above group was discovered.

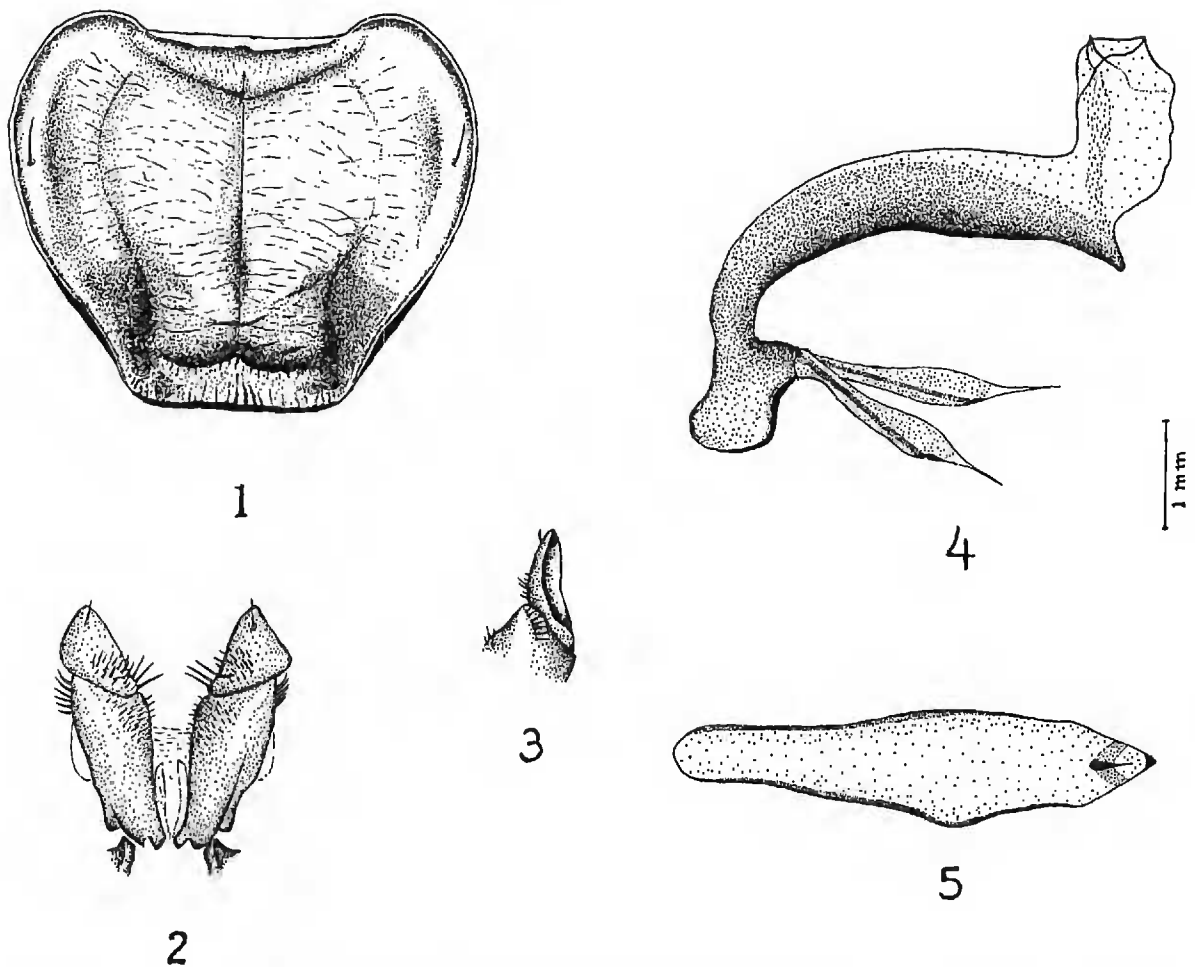
### ***Scaphinotus* (*Stenocantharis*) *hatchi* Beer, new species**

Moderately large, robust (17.5–23 mm long; 7.7–9 mm wide), rather broad and flattened; brown, with head between antennal ridges and eyes, pronotum, and elytral margins brilliant metallic violet red. Dorsal surface with moderate luster, elytra and central portions of pronotum with greenish reflections in some light. Beneath chocolate brown to dark brown.

*Holotype male*.—Head 2.5 mm long, measured from tip of clypeus to posterior margin of eyes, 2.6 mm wide at maximum transverse distance across anterior margin of eyes, front smooth, convex with short, shallow longitudinal depression at apical center of clypeus, surface becoming shallowly transversely wrinkled between antennal ridges and eyes, genae slightly and obtusely notched in front of eyes; antennae reaching two thirds length of body, basal segment reaching beyond eyes, only slightly shorter than the next two combined; eyes moderately prominent. Pronotum cordate, 3.4 mm long, 4.3 mm wide, slightly wider at base than apex; sides strongly rounded in front, oblique in posterior half, posterior angles rounded, with setigerous punctures near middle of lateral margin, margins moderately reflexed, more so in apical half; anterior margins broadly sinuate, base truncate; disk biconvex, formed by a well impressed but fine median line, with both anterior and posterior impressions well indicated, a short longitudinal depression anterior to base of each elytron; surface finely and sparsely wrinkled (Fig. 1). Elytra oval, flattened, nineteen striae feebly impressed becoming irregular and rather indistinct at sides, intervals with fine, shallow punctures, striae five and eleven slightly elevated and more distinct, elytral margins with small, rather regularly placed punctures becoming nearly obsolete toward apex; epipleura smooth. Under-surface smooth, posterior coxal plate bearing anterior and posterior setae, front and middle femora with punctures on anterior face, none on ventral surface. First three segments of anterior tarsi slightly dilated, tarsal pads (adhesive hairs) of first segment limited to slightly less than its apical half, second and third for most of their length; last segment with two anal setae. Length, from tip of mandibles to apex of elytra along mid-dorsal line, 18 mm; greatest width across elytra, 8.2 mm.

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FIGS. 1-5. *Scaphinotus hatchi* Beer, new species. FIG. 1. Pronotum, dorsal view. FIG. 2. Female genitalia, ventral view. FIG. 3. Female genitalia, stylus, lateral view. FIGS. 4-5. Male genitalia. FIG. 4. Lateral view. FIG. 5. Dorsal view.

*Allotype female*.—Somewhat larger and more robust, slightly less red on head and pronotum; antennae reaching slightly beyond middle of elytra when laid along side; front tarsi not dilated and without tarsal pads, anal segment with four setae. Length, measured as in male, 20.5 mm; width, 8.7 mm.

*Holotype male*, allotype and 16 paratypes taken along a two mile stretch of road TWO MILES EAST OF ISLET CAMPGROUND AT WALDO LAKE, LANE COUNTY, OREGON, 29 July 1970. Two original paratypes were collected on 27 September 1969, the remainder, 67 paratypes were collected between the dates of 2 June and 4 August 1970, all at the type locality by F. M. and V. S. Beer. The holotype, allotype and six paratypes will be deposited with the Museum of the California Academy of Sciences, four with the U. S. National Museum, four with the American Museum of Natural History, four with the Museum of Comparative Zoology, eight with Dr. Melville H. Hatch of the University of Washington, Seattle, Wn., and four with Dr. G. E. Ball of the University of

Alberta, Edmonton, Alberta, Canada. The remainder will be retained in my collection.

It is with much pleasure that I dedicate this beautiful species to my good friend Dr. Hatch, whose untiring labor has done so much for the coleopterology of the Pacific Northwest.

Very little variation is observable except in size and in the number of striae, ranging from eighteen to twenty, eighteen or nineteen being the most common. The background color in a few instances appears to be a very deep brown black, but under magnification the basic color is brown. The punctures on the front and middle femora are quite variable, ranging from two in one specimen to eight in another. The fourth tarsal segment also has a few adhesive hairs in some males. Two anal setae are most common for the males, while two, three, four, five or six occur in the females, four being the most common.

*Scaphinotus hatchi* is most closely related to *S. a. angusticollis* Mann., and this is the only Northwestern species with which it might be confused. It would key to *S. angusticollis* in Hatch's monograph (1953, p. 46, couplet 5), but may readily be separated from that species by having the head and pronotum red on a brown background instead of green on a black background, elytra widest at middle instead of back of middle, and the first segment of protarsi smooth in the basal half instead of in the basal third. Van Dyke could find no differences in the male genitalia of *S. angusticollis* and its subspecies, but this organ in *S. hatchi* (Figs. 4 and 5) is decidedly different, as is also the female structure (Figs. 2 and 3), and both will also serve to separate the two species.

*Scaphinotus hatchi* was taken in mature stands of mountain hemlock (*Tsuga mertensiana* (Bong.) Sarg.) under old logs, bark and occasionally rocks, being most abundant in broad depressions of the region which contained more moisture and was thinly overgrown with stands of dwarf red whortleberry (*Vaccinium scoparium* Leiberg).

#### LITERATURE CITED

- HATCH, M. H. 1953. The Beetles of the Pacific Northwest, Part I, Univ. Wash. Publ., Seattle, Wash., pp. 45-49.
- VAN DYKE, E. S. 1944. A Review of the Subgenera *Stenocantharis* Gistel and *Neocychnus* Roeschke of the Genus *Scaphinotus* Dejean. Entomol. Amer., pp. 1-19.